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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PARDO, THUY N

ART UNIT PAPER NUMBER

2175

DATE MAILED: 10/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/336,200

Applicant(s)

CORSTON-OLIVER ET AL.

Examiner

Thuy Pardo

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35,41,43 and 62-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35,41,43 and 62-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's amendment filed on August 15, 2002 in response to Examiner's Office Action has been reviewed. Claims 41 and 43 have been amended, and claim 42 has been added.
2. Claims 1-35, 41, 43, and 62-66 are presented for examination.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-32 and 62 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. The claim merely sets forth a method of determining a relationship between first and second textual inputs, not a concrete method or a computer program product. According to the examination Guidelines for Computer-Related Inventions, 1206 OG 211, see also M.P.E.P 2106, a statutory process must either result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or be limited by the language of the claim to a practical application within the technological arts. The content of these claims does not constitute a statutory process, machine, manufacture or composition of matter. Correction is required.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 23, 41, and 62 are provisionally rejected under the judicially created doctrine of double patenting over claims 1, 29, 49, and 72 of copending Application No. 09/097,979. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application

since the referenced copending application and the instant application are claiming common subject matter, as follows:

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-35, 41, 43, and 62-66 are rejected under 35 U.S.C. § 103 as being unpatentable over **Turtle** US patent no. 5,265,065, in view of **Liddy et al.** (Liddy) patent no. 6,006,221.

As to claim 1, Turtle teaches the invention substantially as claimed, comprising:

obtaining a set of relations [50, 50 of fig. 4; col. 13, lines 20-26];

identifying constituents in the first textual input that have the relations [50, 40, 42 of fig. 4;

component words and the relationship between them, col. 13, lines 20-36]; and

determining the relationship between the first and the concept node of a document representation [44, 58 of fig. 4; a match between the concept node of a search query and the content node of a document representation, col. 13, lines 51-57] based on the constituents identified [col. 11, lines 27-42; ab; col. 13, lines 51-57].

However, Turtle does not explicitly teach a second textual input that have relations. Liddy teaches a second textual input that have relations [provide additional term-based representations, see the abstract; fig. 6; col. 2, lines 62-65].

Therefore, It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to have modified the communication service system of Turtle wherein the relationship between the first and the concept node of a document representation provided thereof would have incorporated the teachings of Liddy especially the feature of providing the second textual input that have relations; the motivation being to enhance the versatility of Turtle's system by allowing the augmentation of concept level matching through the use of term based representation matching [Liddy, col. 23, lines 10-21].

As to claim 2, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches determining the relationship between the first and second textual inputs based on the relations [col. 13, lines 51-57].

As to claim 3, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches obtaining a hierarchy of grammatical relations [40 of fig. 4]; and obtaining a hierarchy

threshold based on a usefulness of grammatical relations in the hierarchy in determining the relationship between the first and second textual inputs [see example, 44 of fig. 4].

As to claim 4, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches determining the usefulness of identified constituents by locating the grammatical relations associated with the identified constituents in the hierarchy [40 of fig. 4].

As to claim 5, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches identifying low ranked constituents having corresponding grammatical relations located in the hierarchy below the hierarchy threshold [stop words removed, col. 10, lines 40-56].

As to claim 6, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches determining the relationship based on constituents in the first textual input, other than the low ranked constituents [col. 9, lines 20-39].

As to claim 7, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches identifying high ranked constituents having a corresponding grammatical relation located in the hierarchy at least as high as the hierarchy threshold [col. 9, lines 57 to col. 10, lines 22]; and annotating the high-ranked constituents with a weighting value which weights the high ranked constituents higher than low-ranked constituents [col. 10, lines 12-32].

As to claim 8, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches annotating the high-ranked and low-ranked constituents with fine values based on a location of grammatical relations corresponding to each of the constituents in the hierarchy, the fine values being indicative of relative usefulness of the constituents in determining the relationship [col. 9, lines 57 to col. 10, lines 44; 40 of fig. 4].

As to claim 9, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches determining the relationship based on the fine values associated with constituents [col. 9, lines 67 to col. 10, lines 22].

As to claim 10, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches preferentially matching terms in the first textual input against higher constituents in the second textual input having corresponding grammatical relations located relatively higher on the hierarchy than grammatical relations corresponding to lower constituents [col. 10, lines 12-32].

As to claim 11, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches obtaining an index having entries corresponding to the document, the entries corresponding to only the higher constituents as opposed to the lower constituents [col. 10, lines 12-32]; and matching search terms in the query against the entries in the index [col. 15, lines 55-60].



As to claim 12, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches obtaining an index having entries corresponding to the document, the entries corresponding to the higher constituents having higher weighting values associated therewith and the entries corresponding to the lower constituents having lower weighting values associated therewith [col. 15, lines 46-66]; and matching search terms in the query against the entries in the index based on the higher and lower weighting values [fig. 6A; col. 13, lines 50 to col. 14, lines 66].

As to claim 13, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches obtaining a hierarchy of case information; and obtaining a hierarchy threshold based on the usefulness of a constituent having that case [col. 15, lines 1-17].

As to claim 14, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches determining the usefulness of the identified constituents by locating the case information associated with the identified constituents in the hierarchy [40 of fig. 4].

As to claim 15, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches identifying low ranked constituents having the case indicated by the case information [col. 15, lines 1-17].

As to claim 16, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches determining the relationship based on constituents in the first textual input, other than the low ranked constituents [col. 17, lines 1-44].

As to claim 17, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches identifying high ranked constituents having corresponding case information located in the hierarchy at least as high as the hierarchy threshold [col. 9, lines 57 to col. 10, lines 22]; and annotating the lower ranked constituents with a weighting value which weights the low ranked constituents lower than the high ranked constituents [col. 10, lines 12-32].

As to claim 18, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches annotating the low ranked and high ranked constituents with fine values based on a location of the case information associated with each of the low ranked and high ranked constituents in the hierarchy, the fine values being indicative of relative usefulness of the constituents [col. 9, lines 57 to col. 10, lines 44; 40 of fig. 4].

As to claim 19, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches determining the relationship based on the fine values associated with the constituents [col. 9, lines 67 to col. 10, lines 22].

As to claim 20, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches preferentially matching terms in the first textual input against higher ranked constituents in the second textual input having corresponding grammatical relations located relatively higher on the hierarchy than grammatical relations corresponding to lower constituents [col. 15, lines 1-66].

As to claim 21, Turtle teaches the invention substantially as claimed. Turtle further teaches obtaining an index having entries corresponding to the document, the entries corresponding to only the higher ranked constituents as opposed to the lower ranked constituents [col. 15, lines 1-17]; and matching the search terms in the query against the entries in the index [col 15, lines 1-66].

As to claim 22, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches obtaining an index having entries corresponding to the document, the entries corresponding to the higher ranked constituents having higher weighting values associated therewith and the entries corresponding to the lower ranked constituents having lower weighting values associated therewith; and matching the search terms in the query against the entries in the index based on the higher and lower weighting values [col. 15, lines 1-66].

As to claim 41, Turtle and Liddy teach the invention substantially as claimed. Turtle further teaches a linguistic analysis of at least a portion of the first or second textual input [linguistic relationship, col. 13, lines 20-26].

6. The elements of claims 23-35, 43, and 62-66 are rejected in the analysis above in claims 1-22 and 41 above, and these claims are rejected on that basis.

7. Applicant's arguments with respect to claims 1-35, 41, 43, and 62-66 have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Pardo, whose telephone number is (703) 305-1091. The examiner can normally be reached Monday through Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

The fax phone number for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 (After Final Communication)

(703) 746-7239 (Official Communication)

(703) 746-7240 (For Status inquiries, draft communication)

and/or:

(703) 746-5616 (*Use this Fax#, only after approval by Examiner, for "INFORMAL" or "Draft" communication. Examiner may request that a formal/amendment be faxed directly to then on occasions).*

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks<sup>3</sup>

Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**Or:**

(703) 308-5359, (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington.

VA., Sixth Floor (Receptionist).



Thuy Pardo  
October 23, 2002